

Work Order ID 146368

Wednesday, May 18, 2016 8:49:38 AM

146368

Page 1

Item ID: **D3913-9** Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Hinge Rib
Start Date: 5/20/2016 Start Qty: 2.00 ***2* 58A** Cust Item ID:
Required Date: 5/24/2016 Req'd Qty: 2.00 ***2* 58A** Customer:
Reference:

Approvals: Process Plan: MLJ Date: MAY 18 2016 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3913	C

100 0.00
100
Large Fab Memo 0.36
Large Fab 1- Cut tube as per dwg D3913
2- remove identification marks and deburr

110 QC6- Inspect dimensions to drawing 0.00
110
QC Memo 0.00
Quality Control

120 Identify as per dwg & Stock Location: WWA 04 0.00
120
Packaging Memo 0.02
Packaging LOCATION: WA004

5 SEP 16-09-08

5x DAS 43 9-89 SEP 26 2016

5x DAS 43 9-89 SEP 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 146368

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146368

Page 2

Item ID: D3913-9 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Hinge Rib
Start Date: 5/20/2016 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 5/24/2016 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC21- Final Inspection - Work Order Release	0.00							
130						DAS		SEP 2 6 2016	
QC	Memo	0.20				21			
Quality Control						9-89			
								DAS	
								21	
								9-89	SEP 2 6 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Wednesday, May 18, 2016 8:49:38 AM

Page 1

Work Order ID: 146368

146368

Parent Item: D3913-9

D3913-9

Parent Item Name: Hinge Rib

Start Date: 5/20/2016

Required Date: 5/24/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A new issue DD 10.03.19 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304TS0.750W.049		Purchased	No			100	f	604.6600	7.875	16.57895			

M304TS0 750W 049

304 SQ Tube .75x.75x.049W

Location

WA004

Loc Qty

604.659968

0.219968

M133762

M134172

M134263

M134506

M134526.

M134680

28.056

131.5

20.05

60.834

364

Loc Code

****** ~~B135226~~ → 34
~~B134940~~ → 8 C 1609-08

B135226 → 34

B134940 → 8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

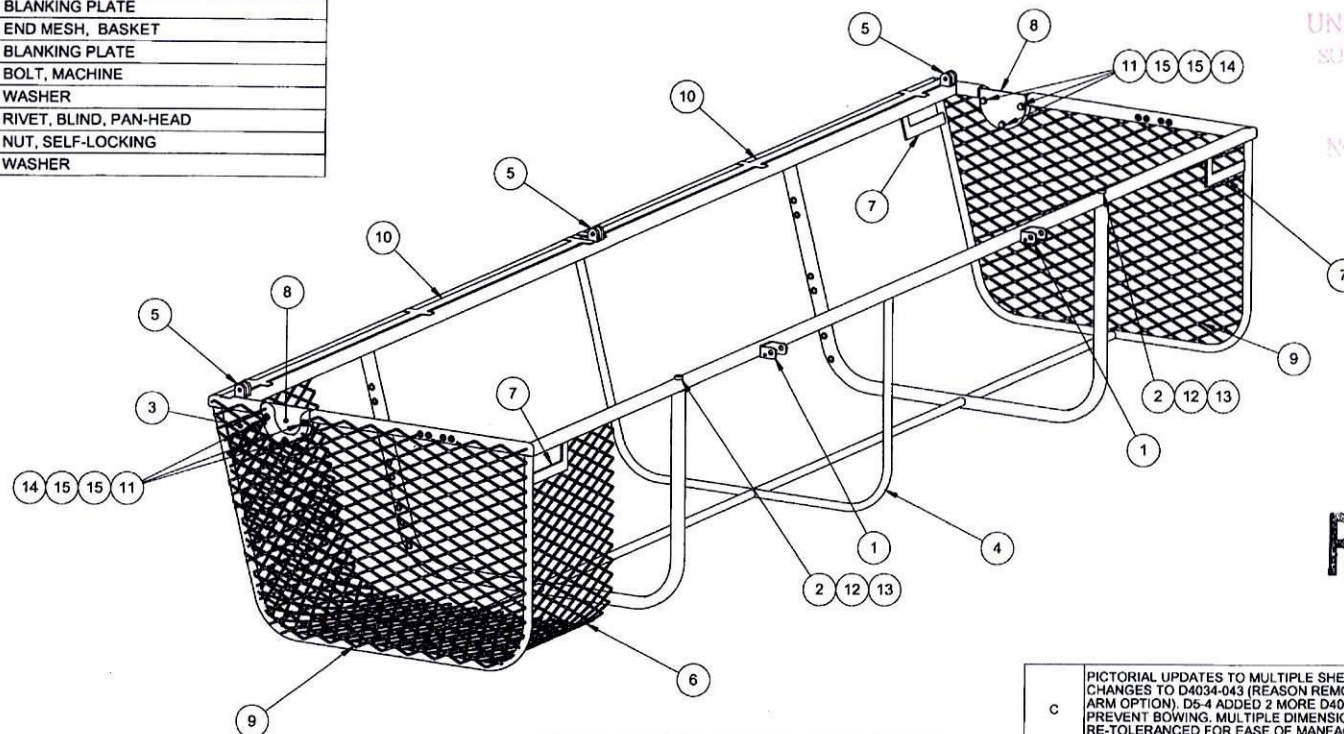
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation		Disposition			

Root Cause	FAULT CATEGORY		
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER :			

ITEM	QTY	P/N	DESCRIPTION
	X	D3913-041	LONG BASKET BASE ASSY (350)
1	2	D2581	MOUNTING BRACKET
2	2	D2931	BUMPER
3	1	D3913-15	WIDE HANDLE PLATE
4	1	D3913-101	TUBULAR ASSY (350 LONG BASKET)
5	3	D4016-1	HINGE HALF, BASE
6	1	D4020-1	MESH (350 BASKET LONG BASE)
7	3	D4021-1	HANDLE PLATE
8	2	D4021-5	BLANKING PLATE
9	2	D4020-11	END MESH, BASKET
10	2	D4672-1	BLANKING PLATE
11	6	AN3-10A	BOLT, MACHINE
12	2	AN960JD8	WASHER
13	2	MS20600AD4W3	RIVET, BLIND, PAN-HEAD
14	6	MS21042L3	NUT, SELF-LOCKING
15	12	NAS1149F0332P	WASHER



D3913-041 LONG BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 43.9 lbs APPROX
- 8) INSTALL AFTER FINISH
- 9) MASK HOLES PRIOR TO POWDER COAT
- 10) WELD PER DART QSI 004

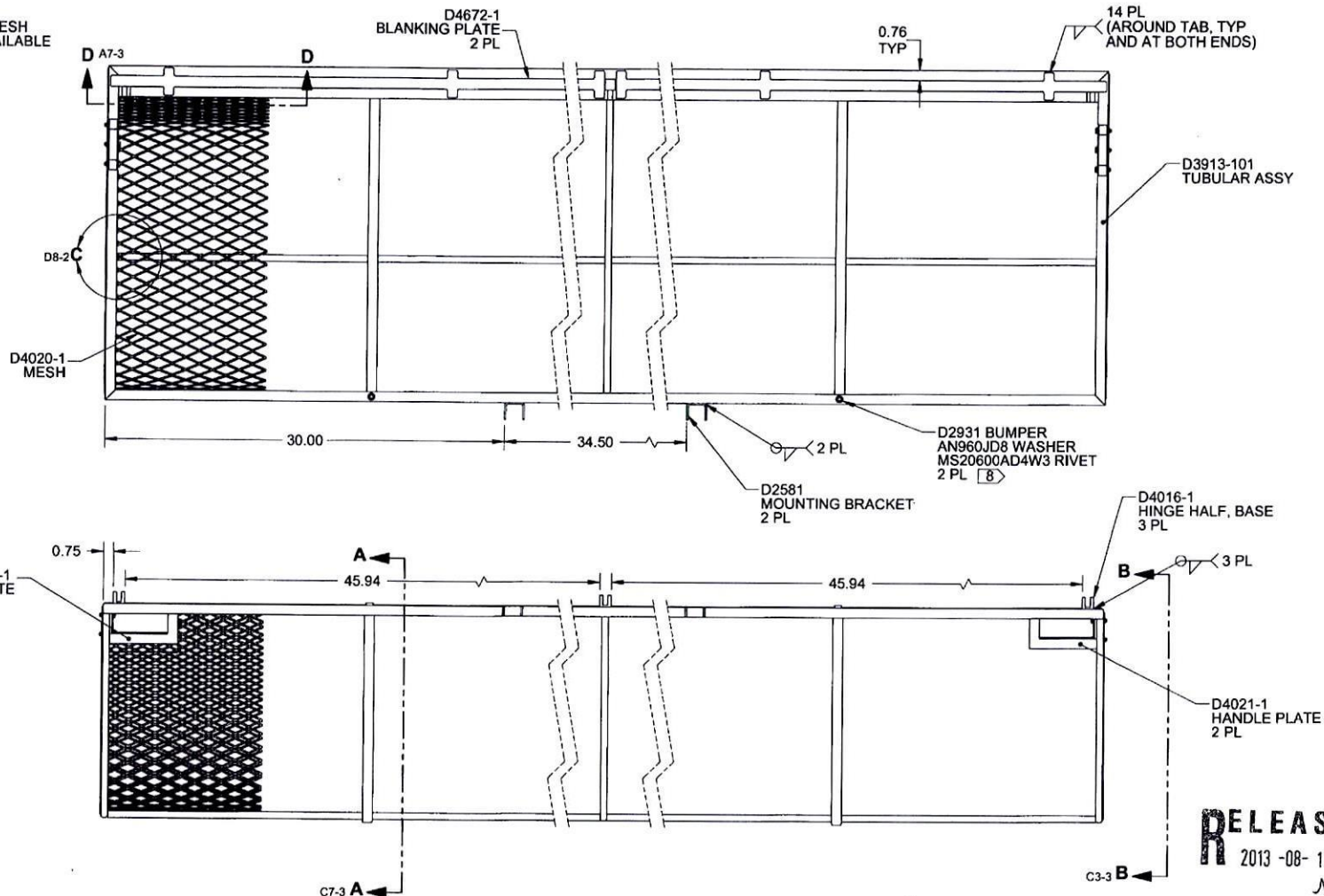
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 146368 MLS
16-05-18

RELEASED
2013-08-16

C	PICTORIAL UPDATES TO MULTIPLE SHEETS FOR CHANGES TO D4034-043 (REASON REMOVAL OF PROP ARM OPTION). D5-4 ADDED 2 MORE D4017-7 RIBS TO PREVENT BOWING. MULTIPLE DIMENSIONS RE-TOLERANCED FOR EASE OF MANUFACTURE. SECTION F-F & G-G ADDED.	AJS	13.07.18
B	ADD D4672-1 (ZN C4-1, C6-1, D2-2, D2-3, & D5-2). REASON: PART12-197.	MB	12.06.15
A	NEW ISSUE	JPH	10.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED	JP		
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.18		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3913 TITLE LONG BASKET BASE ASSY (350) NTS SHEET 1 OF 6 SCALE REV. C COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD			

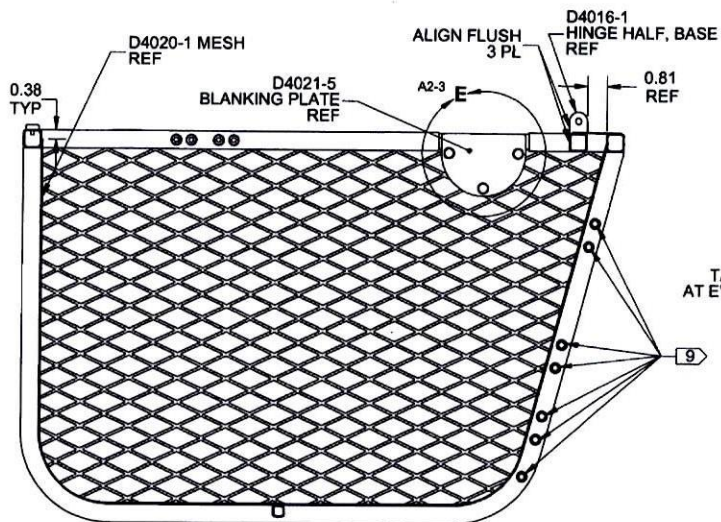
TACK WELD MESH
AT EVERY AVAILABLE
LOCATION

DETAIL C D7-2
SCALE: 2X

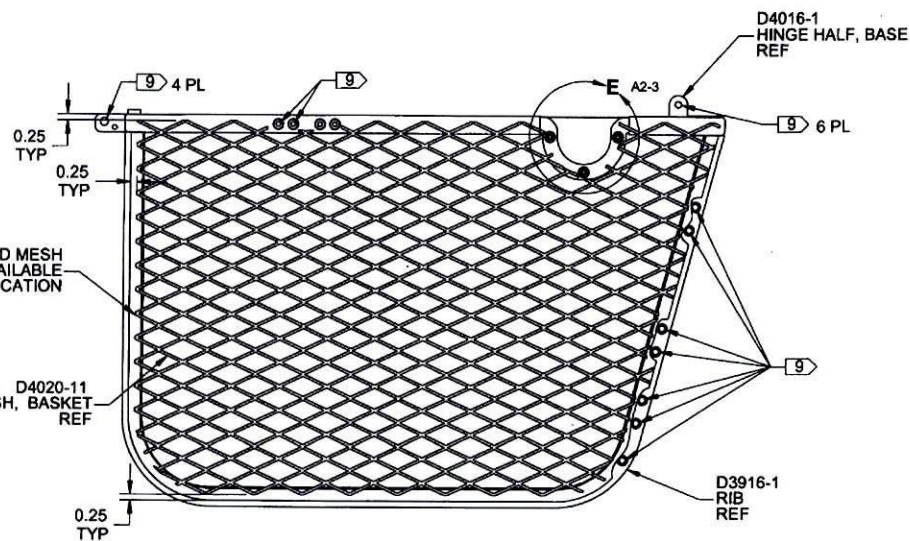


D3913-041 LONG BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

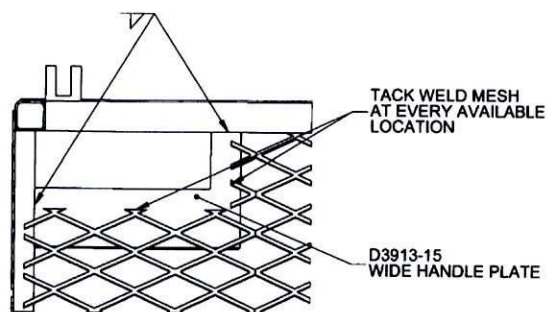
DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	47	DRAWING NO.	REV. C
MFG. APPR.		D3913	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		LONG BASKET BASE ASSY (350) NTS	
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SECTION A-A A5-2



VIEW B-B A2-2



SECTION D-D D6-2
TYPICAL FOR ALL
HANDLE PLATES

8 D4021-5
BLANKING PLATE

8 AN3-10A BOLT, MACHINE
NAS1149F0332P WASHER, 2X
MS21042L3 NUT
3 PL

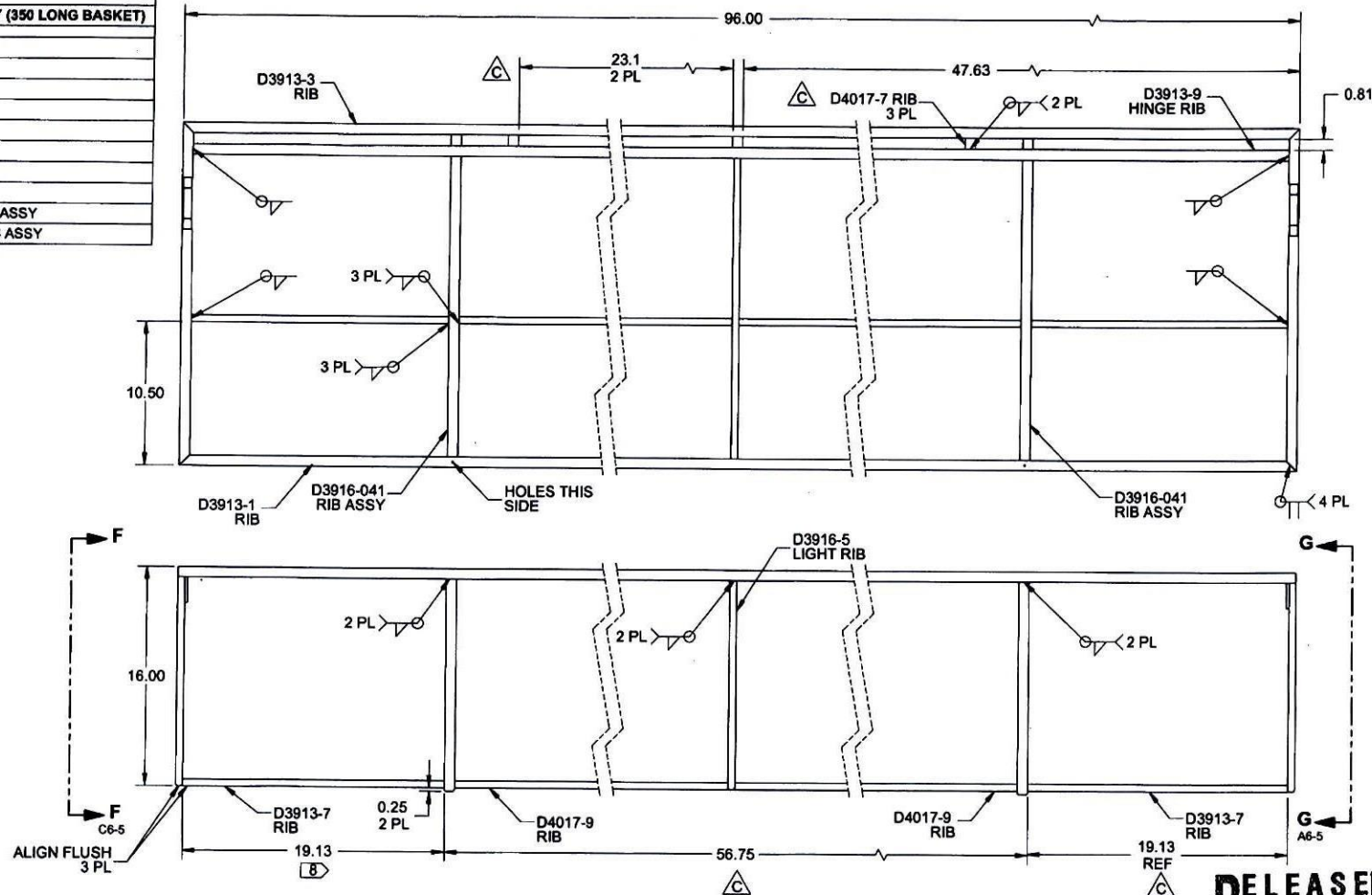
TRIM MESH LOCALLY
Ø0.50 - Ø0.60
TO CLEAR FASTENERS

DETAIL E D2-3
D6-3

RELEASED
2013-08-16

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3913	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DE APPR.		LONG BASKET BASE ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

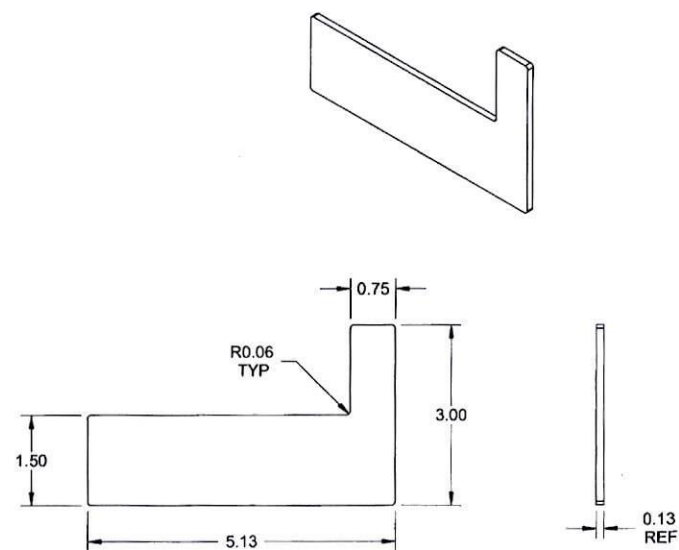
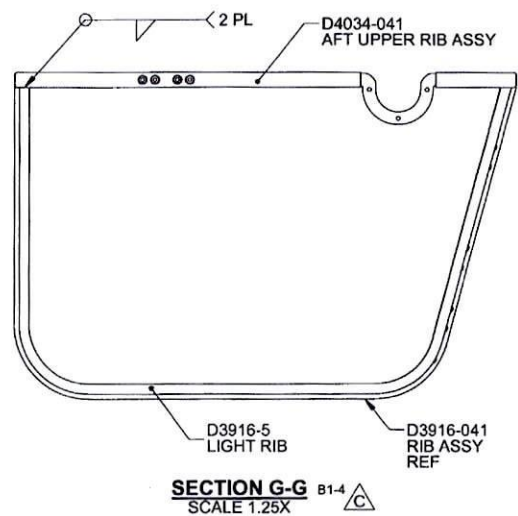
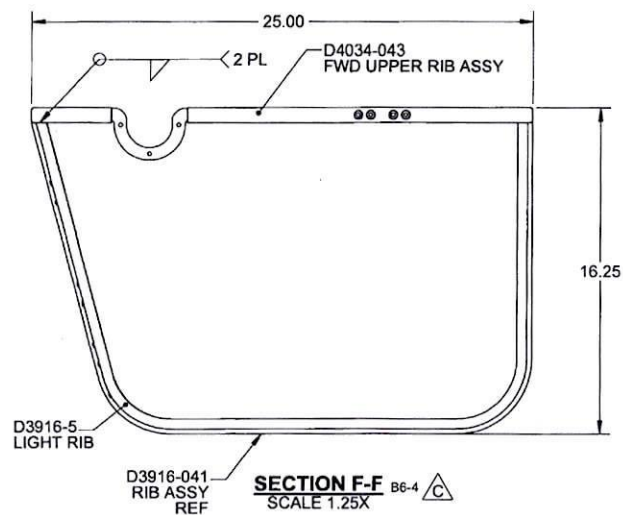
ITEM	QTY	P/N	DESCRIPTION
	X	D3913-101	TUBULAR ASSY (350 LONG BASKET)
1	1	D3913-1	RIB
2	1	D3913-3	RIB
3	2	D3913-7	RIB
4	1	D3913-9	HINGE RIB
5	3	D3916-5	LIGHT RIB
6	2	D3916-041	RIB ASSY
7	3	D4017-7	RIB
8	2	D4017-9	RIB
9	1	D4034-041	AFT UPPER RIB ASSY
10	1	D4034-043	FWD UPPER RIB ASSY



- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 22.65 lbs
 - 8) TOLERANCE FOR XX.XX DIMENSIONS ± 0.06 FOR D3913-101
 - 9) WELD PER DART QSI 004

D3913-101 TUBULAR ASSY (350 SHORT BASKET)

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	4?	DRAWING NO.	REV. C
MFG. APPR.		D3913	SHEET 4 OF 8
APPROVED		TITLE	SCALE
DE APPR.		LONG BASKET BASE ASSY (350) NTS	
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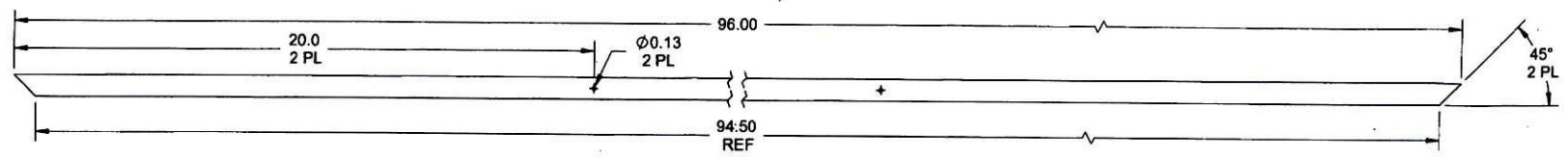
D3913-15 WIDE HANDLE PLATE

NOTES:

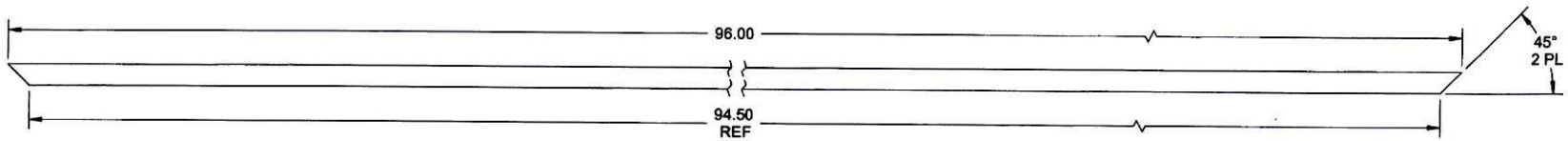
- 1) MATERIAL: 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 REF DART SPEC M304S11GA
- 2) FINISH : NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.31 lbs

RELEASED
2013-08-16

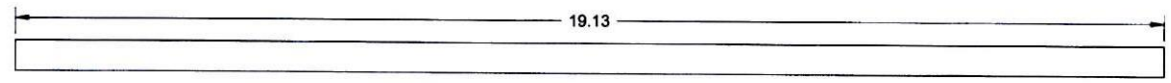
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO. D3913	REV. C
MFG. APPR.		TITLE	SHEET 5 OF 6
APPROVED		SCALE	
DE APPR.		LONG BASKET BASE ASSY (350) NTS	
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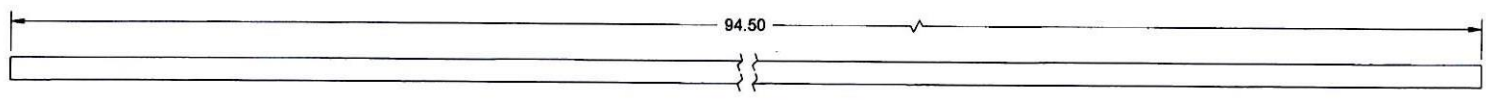
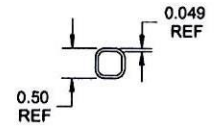
D3913-1 RIB



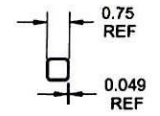
D3913-3 RIB



D3913-7 RIB



D3913-9 HINGE RIB



NOTES:

- 1) MATERIAL -1, -3, -9: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.750W.049
- 7: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.500W.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: SEE ASSEMBLED WEIGHTS

RELEASED
2013-08-16

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. D3913	REV. C
MFG. APPR.	<i>[Signature]</i>	TITLE LONG BASKET BASE ASSY (350) NTS	SHEET 6 OF 6
APPROVED	<i>[Signature]</i>	SCALE	
DE APPR.	<i>[Signature]</i>		
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